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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,108	09/09/2003	Hironori Okado	116713	9829
25944	7590	06/07/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			VY, HUNG T	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/657,108

Applicant(s)

OKADO, HIRONORI

Examiner

Hung T. Vy

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 and 7-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 5/18/05  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments, filed 4/18/2005, with respect to the rejection(s) of claim(s) 1-12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of admitted prior art (Admission) in fig. 16 e or 16 l or McCorkle, U.S. Patent No. 6,599,545.

### Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (see table below) of copending Application No. 10/667,347, No. 10/657,108, and No. 10/654432.

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10/655,304  
1,3 and 1510/667,347  
1,1010/654,432  
1,1110/657,108  
1,11 and 12

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in present application are similar to claims in co-pending application as shown.

**This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.**

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

4. Claims 1-5,7-9 and 12 are rejected under 35 U. S. C. § 102 (e) as being anticipated by of admitted prior art (Admission) in fig. 16 e or 16 I.

Claim 1, Admission discloses an antenna, comprising: ground pattern (1011); and a planar element (1006 or 1014) (See paragraph 3, page 3 in specification), which

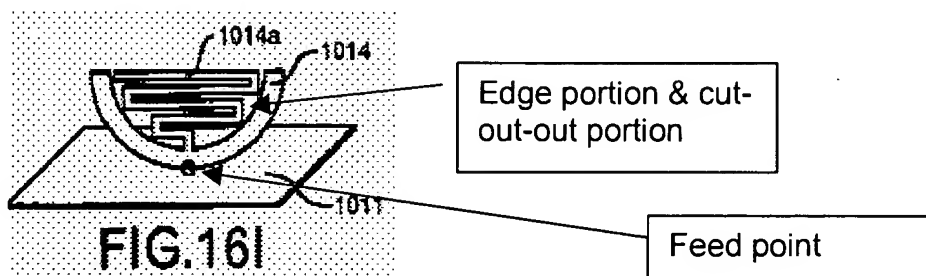
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has a feed point and is juxtaposed with said ground pattern (1011), and wherein said planar element has a trimmed portion causing to continuously change a distance between said planar element (1006 or 1014) and said ground pattern (1011)(See fig. 16 or 16I), and said trimmed portion is composed of an arc (see fig. 16).

Claim 2, Admission discloses an antenna, wherein said trimmed portion is formed from said feed point toward a side opposite to said ground pattern (1011)(See fig. 16).

Claim 3, Admission discloses an antenna, wherein said planar element (1006 or 1014) and said ground pattern (1011) are formed extending along counter directions respectively (See fig. 16).

Claim 4, Admission discloses an antenna, wherein said ground pattern (1011) is disposed without surrounding said planar element (1006 or 1014)(See fig. 16).



Claim 5, Admission discloses an antenna, wherein said distance from said trimmed portion of said planar element (1006 or 1014) to said ground pattern (1011) is gradually increased as being farther away from said feed point of said planar element (1006 or 1014)(See fig. 16).

Claim 7, Admission discloses an antenna, wherein said at least a part of an edge portion other than said trimmed portion is formed so as to be opposite to the ground pattern side (1011) of said planar element (2014)(fig. 16I above).

Claim 8, Admission discloses planar element has a cut-out portion formed at an edge portion opposite to the ground pattern side (1011) of said planar element (See fig above)

Claim 9, Admission discloses an antenna, wherein said planar element (1006 or 1014) is symmetric with respect to a straight line passing through said feed point of planar element (Fig. 16 above).

Claim 12, Admission discloses an antenna, comprising a ground pattern (1011); and a planar element (1006 or 1014) that has a feed point and whose edge portion opposite to said ground pattern (1011) has a trimmed portion at which a distance with said ground pattern (1011) is gradually increased from said feed point, and wherein said trimmed portion is composed of an arc, and said ground pattern (1011) is juxtaposed with said planar element (1006 or 1014) without fully surrounding said edge portion of said planar element (1006 or 1014)(Fig. 1A).

5. Claim 1 is rejected under 35 U. S. C. § 102 (e) as being anticipated by McCorkle, U.S. Patent No. 6,590,545.

Claim 1, McCorkle discloses an antenna, comprising: ground pattern (105); and a planar element (110) (see fig. 1), which has a feed point 135 and is juxtaposed with said ground pattern (105), and wherein said planar element 110 has a trimmed portion causing to continuously change a distance between said planar element (110) and said

ground pattern (105)(See fig. 1), and said trimmed portion is composed of an arc (see fig. 1).

6. Claim 11 is rejected under 35 U. S. C. § 102 (e) as being anticipated by of admitted prior art (Admission) in fig. 16 B.

Claim 11, Admission discloses an antenna, comprising: a ground pattern 1002; and a planar element 1005 that has a feed point 1003 and whose edge portion opposite to said ground pattern 1002 has a trimmed portion that makes a distance with said ground pattern 1002 vary and is composed of at least either one of a curved line and line segments which are connected while their inclinations are changed stepwise (See fig. 1B-1), and wherein said ground pattern 1002 is disposed without fully surrounding said edge portion of said planar element 1005 (See fig. 1B-1), and said planar elements 1005 and said ground pattern 1002 are disposed without complete overlap with each other, and both planes thereof are parallel or substantially parallel to each other (See fig. 1B).

7. Claim 11 is rejected under 35 U. S. C. § 102 (e) as being anticipated by Bancroft et al., U.S. Patent No. 6,603,429.

Claim 11, Bancroft et al. disclose an antenna, comprising: a ground pattern 50; and a planar element 18 that has a feed point 16 and whose edge portion opposite to said ground pattern 50 has a trimmed portion that makes a distance with said ground pattern vary and is composed of at least either one of a curved line and line segments which are connected while their inclinations are changed stepwise (See fig. 1), and wherein said ground pattern 50 is disposed without fully surrounding said edge portion

of said planar element 18 (See fig. 1), and said planar elements 18 and said ground pattern 50 are disposed without complete overlap with each other, and both planes thereof are parallel or substantially parallel to each other (See fig. 1A).

**Claim Rejections - 35 U.S.C. § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 10 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Bancroft et al., U.S. patent No. 6,603,429 in view of Konishi et al., U.S. Patent No. 6,707,427.

Claim 10, Bancroft et al. disclose all limitations of invention except for planar element formed on a resin substrate. However, Konishi et al. disclose planar element formed on resin substrate (See column 12, line 4). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Bancroft et al. to have planar element formed on resin substrate as taught by Konishi et al. The motivation for doing so would have been to provide resin substrate because Bancroft et al. disclose the planar antenna formed on PCB and can be other materials (See column 3, line 30-33) and Konishi et al also disclose the circuit board. Furthermore, It would have been obvious to one of ordinary skill in the art at the time the invention was made



to the resin as circuit board since it was known in the art that nothing new with the resin substrate.

### **Conclusion**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy  
Art Unit 2821  
May 31, 2005.

